
SMALL GASOLINE ENGINES

Part ID: (20 points)

1. Identify #1
 - A. points
 - B. condenser
 - C. coil
 - D. recoil
2. Identify #2
 - A. armature
 - B. magnetron
 - C. oil slinger
 - D. governor
3. Identify #3
 - A. valve retainer
 - B. valve spring
 - C. piston rod cap
 - D. main bearing cap
4. Identify #4
 - A. aluminum flywheel
 - B. cast iron flywheel
 - C. stainless steel flywheel
 - D. titanium flywheel
5. Identify #5
 - A. valve cover
 - B. head
 - C. timing chain cover
 - D. recoil housing
6. Identify #6
 - A. oil fill tube
 - B. fuel line
 - C. crankcase ventilator tube
 - D. valve guide
7. Identify #7
 - A. camshaft
 - B. crankshaft
 - C. rocker arm
 - D. valve lifter
8. Identify #8
 - A. tappet
 - B. intake valve
 - C. exhaust valve
 - D. valve spring
9. Identify #9
 - A. pulsa-jet carburetor
 - B. flow-jet carburetor
 - C. vacu-jet carburetor
 - D. walbro carburetor
10. Identify #10
 - A. micrometer
 - B. inside caliper
 - C. outside caliper
 - D. telescoping gauge

Points received in ID area _____

Skill Activity - Manual Related Questions: (16 points total)

Looking at the four spark plugs on the table in front of you, determine the following: (6 points)

11. Which spark plug was running in an engine with a lean mixture? (2 pts)

- A. B. C. D.

12. Which spark plug was running in an engine with a rich mixture? (2 pts)

- A. B. C. D.

13. Which spark plug was running in an engine with a proper fuel mixture? (2 pts)

- A. B. C. D.

Using the tagged engines answer questions 14 – 18. You may use the tools next to the engine and a manual to achieve your answer. (10 points)

14. What is the model number of this engine? _____ 2 pts.

15. What is the proper gap? _____ 2 pts.

-Is the spark plug gap set correctly? Yes No (circle one)

16. What does the manual list as proper intake valve clearance? _____. 2 pts

-Is the gap set correctly? Yes No (circle one)

17. What does the manual list as the correct setting for the magneto clearance? _____ 2 pts

- Is the magneto clearance correct? Yes No (circle one)

18. What oil should be used in this engine if you are planning to run it when the ambient temperature is 45 degrees Fahrenheit? _____ 2pts.

Total points received for Skill Activity _____ (16 possible)

Trouble Shooting

Using the engines tags 19-22, find the part numbers for the items tagged A – D and then determine if the part actually needs replacing, cleaning, or if it is fine in the present condition. (14 points)

19. What is the part number for the part tagged 19? _____ (2.5 points)
Does this part need replacing, cleaning, or is it OK? _____ (1 point)
20. What is the part number for the part tagged 20? _____ (2.5 points)
Does this part need replacing, cleaning, or is it OK? _____ (1 point)
21. What is the part number for the part tagged 21? _____ (2.5 points)
Does this part need replacing, cleaning, or is it OK? _____ (1 point)
22. What is the part number for the part tagged 22? _____ (2.5 points)
Does this part need replacing, cleaning, or is it OK? _____ (1 point)

Total points received for Troubleshooting _____ (14 points)

Tabulation Score Sheet

	Points Possible	Points Received
General Part Identification	20	_____
Skill Activity (Manual Related Questions)	16	_____
<u>Troubleshooting Activity</u>	<u>14</u>	_____
Total Points	50	_____